a water-permeable pressure layer having a load which can suppress a deformation of the packed bed of the solid catalyst and/or the solid adsorbent; wherein the packed bed is provided in a wet-oxidation treatment unit; wherein the water-permeable pressure layer is provided on the packed bed of the solid catalyst and/or the solid adsorbent;

wherein the water-permeable pressure layer is a substance having a plurality of rigid metal particles or ceramic particles; and

wherein the rigid metal particles are one of stainless steel, titanium and zirconium.

8. (Five Times Amended.) The apparatus according to claim 39, wherein: said vertical partition forms the respective segments each with a cross-sectional area of 50 to 5000 cm<sup>2</sup>.

- 9. (Five Times Amended.) The apparatus according to claim 39, wherein: said vertical partition has a height of 20 to 300 cm in the vertical direction.
- 15. (Five Times Amended.) An apparatus for preventing abrasion of a solid catalyst and/or a solid adsorbent while treating waste water, comprising:
- a packed bed of the solid catalyst and/or the solid adsorbent; and
  a layer configured to disperse and mitigate an upward stream of the waste
  water and/or a waste gas;

wherein the packed bed is provided in a wet-oxidation treatment unit;
wherein the dispersing and mitigating layer is provided under the packed bed
of the solid catalyst and/or the solid adsorbent;

wherein the dispersing and mitigating layer is a substance having a plurality of rigid metallic particles or ceramic particles; and

wherein the rigid metallic particles are one of stainless steel, titanium and zirconium.

## Please add the following new Claims 39-42:

39. (New) The apparatus according to claim 6, further comprising:
a vertical partition configured to divide a boundary area between an upper part
of the packed bed and the pressure layer into a plurality of respective segments
formed in a vertical direction.

40. (New) The apparatus according to claim 10, further comprising:

a vertical partition configured to divide a boundary area between an upper part of the packed bed and the pressure layer into a plurality of respective segments formed in a vertical direction.

41. (New) The apparatus according to claim 40, wherein the respective segments formed by the vertical partition have a cross-sectional area of 50 to 5000 cm<sup>2</sup>.

42. (New) The apparatus according to claim 40, wherein the vertical partition has a height of 20 to 300 cm in a vertical direction.